

**Minutes of the Carlisle Board of Health  
September 28, 2010**

Present: Board Members Jeff Brem Chair, Bill Risso, Mark Caddell; Cathy Galligan; also present: Linda Fantasia, Agent, John Luther, Building Inspector and Laura Sholten (Mosquito);

The meeting was called to order at 7:30 p.m. at Town Hall.

**MINUTES** – The Board reviewed and edited minutes of 9/7/10 deleting the reference to “approved antifreeze” and minor typographical edits.

**It was moved (Risso) and seconded (Galligan) to approve the minutes of 6/29/10 as corrected. Motion passed 4-0-0.**

**BOARD VACANCY** – The Board agreed to send a personal thank you note to Michael Holland for his long time service to the Board. Holland and his wife, Tricia Smith, have relocated their cheese making operation to Western Massachusetts.

**ADMINISTRATIVE REPORTS**

**Home Modification Loan Program** – Fantasia described the program which provides zero and low interest loans up to \$30,000 for home modifications for seniors and disabled residents. Elizabeth Barnett arranged a presentation for town departments. There is interest in organizing an information event on various programs that are available for residents including the septic loan program. The Board agreed to help sponsor the event.

**Septic Loan Summary** Fantasia recommends requesting an additional \$40,000 from the Trust. The town has borrowed \$90,000 and there is a balance of \$58,000. The Board recently approved a loan of \$40,000 and two other residents have expressed interest. Fantasia said it is better to maintain a balance so that work is not delayed when an application is approved. Although the account should act as a revolving account, the Finance Director would prefer to fund requests only as presented in order to reduce the town’s financial exposure.

**ICS 200 Training** – Fantasia will be taking the training 9/29-9/30.

**Curb Cuts** – Luther explained that many towns require permits for accessing properties from public roadways. This allows the town to recover damage to the road or curbing. New construction is not a problem because it is already under a permit. If the town decides to regulate access, Luther wanted to know if the Board thought it should apply to septic installations. Some towns require a \$5000 bond. Brem said towns can also use a Consent Agreement. He felt that determining before and after affects can be a problem because it is subjective. Luther said he would use before and after pictures. It would not be the purpose of the regulation to add to the burden of a homeowner needing to replace a system. Contractors, however, are sometimes looking for the easiest access for the job they are doing. The regulation would provide protection for the town should the public road be damaged. Risso noted that Carlisle has a lot of new pathways. It would not be good to have these destroyed without recourse. Luther said he would prefer to exclude septic work or give him some discretion on when a permit should be required similar to the way he enforces the new trench permit requirement. He thanked the Board for its opinion.

**ADMINISTRATIVE REPORTS continued:**

**CPS Lead and Copper Results** –David Flannery copied the Board on testing results. The school is under a copper/lead mitigation program which has been successful. The latest testing results had slightly elevated levels for lead at three sample locations. The taps have been shut off. Overall testing results for the 90<sup>th</sup> percentile did not exceed 0.15 mg/L so no further action is required. Dave Flannery thought there may have been a problem with the sample collection on 8/24/10.

**62 Lowell Road** – The owners have not responded to the Board’s calls. Fantasia checked with Russ Wilson, the design engineer, and Rob Frado. Both agreed that the system was in failure. Effluent was observed in the test pits

close to the existing system. DEP has two forms for local Boards of Health to use, Form 7 Notice of Non-Compliance and Form 8 Order. Town counsel suggested sending a letter instead of a form. The Board instructed Fantasia to use the DEP NON. It will be sent Certified Mail/Return Receipt. The Notice will also be sent regular mail.

**Budget FY11 and preparation for FY12** – Fantasia and Caywood are putting together data on existing office functions, hours; “sister town” comparables, fees, permits and regulatory requirements as well as projected needs. Grant funding, including an inventory of supplies and equipment, will also be included. Fantasia said that since the compensation plan which includes steps is part of the Personnel Bylaw, the Town is required to pay for them. Departments were told that the town would not cover step increases for FY11. Each department would need to fund its own. The Board paid for Fantasia’s increase with grant funding which may not be right. Caywood is due for a step increase next year. With the operating account significantly reduced for FY11, this will be a problem for FY12. The Board suggested Fantasia check with Tim Goddard, the Personnel Administrator,

**BUSPH Intern** – Kathryn Kinzel provided the Board with a summary report on the Lyme Disease Presentation. She conducted a before and after survey on audience knowledge about the disease. The post-presentation result was significantly higher, indicating that the audience felt it had learned a great deal about the disease. The Board was very pleased with this success. The Board asked if the presentation could be given to school parents. Kinzel will look into it with the school nurse. The Board would like Kinzel’s report sent to the Selectmen. Kinzel also reported that all of the remaining H1N1 vaccine had been returned to the state. Fantasia explained that the vaccine on hand was part of a recall classified as expired. This was due to a shorter than expected shelf life. Immunizations that were given were still valid. The refrigerator has been cleaned out. Where to store it permanently needs to be decided. Fantasia will check with EMS.

**788 LOWELL STREET** – Septic system upgrade. This item was removed from the Agenda at the applicant’s request. The design was revised to eliminate the need for waivers. The plan is currently being reviewed.

**625 RUTLAND STREET** – installation of three geothermal wells. Present for the meeting were David Newman, owner, Amanda Schneck, NEXAMP, and Mike Pelletier, Skillings and Sons.

The project involves installing three 6” vertical closed loop geothermal bores approximately 330’ deep. At the last meeting the Board required additional information on setbacks, DEP’s approval, and attendance by a representative. Schneck submitted an updated plan to the Board. The Board reviewed the plan which showed some but not all of the required setbacks. Schneck thought it was reasonable to make certain assumptions based on the location of the house and the existing septic system. The Board however wanted exact setbacks or a note of explanation so that all of the information was provided on the application plan in accordance with current DEP Regulations. The board noted that there was some confusion at the last meeting since DEP had revised its guidelines as of 8/10/10. Schneck said the current plan meets the latest guidelines. DEP also reissued their UIC registration approval. The Board asked how the wells would be drilled and how the driller might handle a cave in. Pelletier explained that the wells (bores) are installed the same as a private well. They sometimes do not know about the conditions until they start drilling. If there is a risk of cave in, the well would be grouted immediately. He expects it will take two days to get the wells drilled and sealed. Schneck said the closed loop system will be 10’ off the side of the house. The number of feet in the loop is determined by the calculated heat demand of the house. They do not alternate between loops. The entire system is available as needed. Newman said the system will provide cooling in the summer. It will be working harder to provide heat in the winter. There is a cost for the electricity to run the pumps. (Brem left the meeting and Caddell took over the chair). Caddell asked how long does it take for the payback for such a system. Newman said around 10-12 years, but there is also the environmental benefit. He said he would not use an open loop system because of the water quality problems in Carlisle.

The Board agreed that although the plan submitted does not have all of the setback information required, it would be possible to add the missing data as follows: if there are no abutting wells within the stated setback, a note should be added to the plan; the aerial plan should be signed by the preparer; all of the setbacks shown or stated must meet the requirements of DEP’s 8/10/10 guidance; a revised plan is required prior to release of the permit.

It was moved (Risso) and seconded (Galligan) to issue a well permit for the installation of three geothermal closed loop wells at 625 Rutland Street with the conditions as stated above. Motion passed 3-0-0.

**DEP Geothermal Well Guidance – Report from Galligan.** Present for the discussion was Carlisle resident Randy Brown who installs geothermal wells.

Galligan reported on her conversation with Joe Cerutti of DEP. According to Cerutti, DEP's previous guidance was found to be too conservative. The review process is now easier for residential use. The Board should be using the most current guidance which is August 10, 2010. Open loop wells are more energy efficient, but they require more analytical work to ensure the water quality. The well must meet drinking water standards and this is not known until after the well is drilled and tested. Open loop wells are usually deeper than typical private wells so there is not a lot of data available on water quality. If a well is also used for drinking, it does not require a bleed since the domestic use serves as the bleed. The bleed is intended to stabilize the well performance during extreme temperatures. Open loop may be more efficient, but there is a risk that it will not be viable.

The Board asked Brown if he was familiar with open loop wells. He said he was and agreed with Cerutti's comments. Brown said he would recommend a standing column (open loop) well first and if there was not enough water or high iron convert it to a closed loop system. It is possible to treat the water but it would be cost prohibitive given the amount of water used in the system. Well bleed usually discharges into a drywell. The Board questioned whether this depletes the aquifer since the water being extracted maybe discharged to a different aquifer. Brown said it would be minimal. Galligan questioned whether the transfer of water from deep in the well to shallow levels might cause pollution if contaminated water is siphoned off through bedrock fractures and dispersed to different aquifers. Brown said the state requires water quality tests initially and then at 30 days. He could not answer the question about cross contamination to other aquifers. He has installed a few geothermal wells in town. Not everyone was taking out a permit which is why DEP began looking into the issue.

The Board asked about maintaining the equipment and whether it might be a possible source of contamination. If the pump was replaced would the well be chlorinated following the work? Brown did not know. Risso said the water in an open loop needs to be potable. The Board asked about the cost of a system. Brown estimated \$32-35000 depending on the duct work required. It can be more expensive retrofitting an existing home than new construction. There is currently a 30% tax credit which is attractive to some homeowners. A GSHP system makes more sense for new construction. Brown said he is available if the Board has questions. The Board thanked Brown for his comments.

#### **ADMINISTRATIVE REPORTS continued**

**Manure Complaint** – Curve Street parcel across from the Bog House. Mark Duffy has installed rows of cow manure intended for spring fertilizing. A Curve street resident complained about excessive odor and flies in the house. Fantasia visited the site last Friday. It was an extremely warm day. The odor was extremely disagreeable and there were a lot of flies. She contacted the Duffys and spoke with Tamma who agreed to bring it to Mark's attention. Brown said he has often ridden his horse in the area. There has always been manure stored there. Fantasia said that it appears the quantity is a lot more this year. The Board discussed whether its local regulation applies to a farming operation. It may be exempt. The Board suggested speaking with the Superintendent of the State Park since the Dairy Farm is leased from the State. Fantasia will also check with the Conservation Commission since this is part of the Cranberry Bog land.

**Chestnut Estates** – The developer had been submitting weekly reports on blasting, drilling and hammering. There was no report last week. Abutters are still complaining about the noise. The Board asked Fantasia to get a schedule to see how much more rock hammering is expected and when the construction work will be done.

**Rocky Point** – the requested information was not submitted nor did anyone representing the Association attend. The Board instructed Fantasia to follow up with an Order sent Certified Mail to all owners. The Board requires a representative at its next meeting. Documents should be submitted by 5 pm. Friday prior to the meeting.

**BILLS** – It was moved (Risso) and seconded (Caddell) to pay the bills as presented. Motion passed 3-0-0

**Septic Loan** – It was moved (Risso) and seconded (Galligan) to pay septic loan invoices as presented. Motion passed 3-0-0.

**MAHB Conference** – Galligan will attend. The Board will use wages to pay for the training since there is no training line item. Wages will be restored from grant funding.

**Regionalization Subcommittee** – 9/29/10. Galligan offered to prepare a departmental function plan for the meeting which Risso will attend.

There was no further business discussed. Meeting voted to adjourn at 9:50 p.m.

Respectfully submitted,

Linda Fantasia  
Recorder